

Claim 8 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In view of the above amending of Claim 8, the rejection under 35 U.S.C. § 112 is deemed overcome and withdrawal of the rejection is respectfully requested.

Claims 1-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Daszkowski in view of Saneinejad et al. Or, alternatively, in view of Dolbear et al.

The above rejections are respectfully traversed and reconsideration thereof is requested. Applicant respectfully submits that the references, taken singly or in combination, fail to teach or suggest the present invention.

The present invention relates to a thermally conductive inlay mat for electrical and electronic appliances, having a base body of simple sheet-like geometry, an underside adapted for contact with an outer wall of the appliance and a top side adapted for contact with a heat source inside the appliance. The mat is formed from an electrically insulating homogeneous material which has properties that produce a sticky surface.

In contrast to the present invention, Daszkowski teaches the use of either a metal resilient material or an electrically insulative non-homogeneous material which is a compound which is electrically insulating but which is filled with thermally conductive particles, especially silver copper, see column 6, line 26-31. This has the disadvantage that in case such a mat is "lacerated" by sharp edges of the electric or electronic parts (for example resistor or capacitor) on a circuit board it may cause a breakdown. Thus, a homogeneous, electrically insulating material having properties that produce a sticky surface is an advantage. The present invention will not cause breakdowns and its grade of thermal conductivity is much higher because not only some particles inside but the whole mat consists of a thermal conductive material. In other words, whereas Daszkowski uses a **composite of two different** materials to provide two different purposes (thermal conductivity and electrical insulation) the present invention can provide these two purposes by one homogenous material. of course this is more effective and more reliable together with an additional advantage being sticky. Being formed from a material having properties which produce a sticky surface has an added benefit that, for

example, an epoxy, sticky tape or foil as taught by Saneinejad et al. and Dolbear et al. does not have to be added to an external surface of the material. Applicant respectfully submits the Examiner has not provide the required support for his statement that a thermal interface pad including conventional epoxy based or acrylic based are sticky. Notwithstanding the above, there is not teaching or suggestion to make the thermal interface of Daszkowski from electrically insulating homogeneous material having properties that produce a sticky surface.

Claims 8-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith et al. in view of Saneinejad et al. or Dolbear et al. This rejection is respectfully traversed and reconsideration thereof is requested.

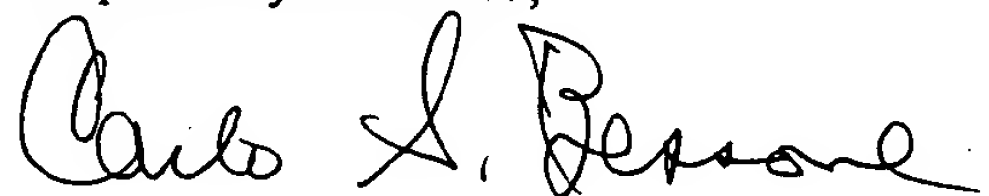
With particular attention to column 3, lines 1-31, Smith et al teaches a shielded heat sink assembly 40 which includes a metallic heat sink sheet 42, a radiant shield sheet 44 and a generally rectangular resilient silicon heat sink block 46. The heat sink sheet 42 has layers 48, 50 of thermally conductive adhesive material disposed on its top and bottom sides. Accordingly, Smith et al fails to disclose a thermally conductive inlay mat formed from a material having properties that produce a sticky surface as recited in independent Claim 8. Moreover, the secondary references cited by the Examiner fail to teach or suggest the invention for the reasons set forth above with respect to independent Claim 1.

Applicant respectfully submits that in view of the above, it is evident that the cited references lack proper teaching, suggestion, or motivation for modifying the thermal interface of Daszkowski or Smith et al. in the manner proposed by the Examiner. The only way the Examiner could have arrived at his conclusion is through hindsight analysis by reading into the art the teachings of the Applicant. Hindsight analysis is clearly improper, since the statutory test is whether "the subject matter as a whole would have been obvious at the time the invention was made."

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

The Application with Claims 1, 2, 4-6 and 8-11 is deemed in condition for allowance and such action is respectfully urged. Should the Examiner persist in the rejection, entry of this Amendment is again requested for consideration on appeal. It is urged, however, that claims are patentably distinguishable and appeal is not necessary. Should the Examiner believe that minor differences exist which, if overcome, would pass the Application to allowance and that said differences can be discussed in a phone conversation, the Examiner is respectfully requested to phone the undersigned at the number provided below.

Respectfully submitted,



Carlo S. Bessone
Reg. No. 30,547

OSRAM SYLVANIA INC.
100 Endicott Street
Danvers, MA 01923
(978) 750-2076

VERSION WITH MARKINGS TO SHOW CHANGES MADEIn the Claims:

Please cancel Claim 3 without prejudice.

Claims 1 and 8 have been amended as follows:

--1. (TWICE AMENDED) A thermally conductive inlay mat (3) for electrical and electronic appliances, having a base body (5) of simple sheet-like geometry, an underside (4) of the base body [being intended to be in] adapted for contact with [the] an outer wall of the appliance and a top side of the base body [being intended to be in] adapted for contact with [the] a heat source inside the appliance, the mat being formed from [a] an electrically insulating homogeneous material having properties that produce a sticky surface.

8. (TWICE AMENDED) An electrical or electronic appliance (10), comprising a housing with wall parts (12, 13, 14) and electrical and/or electronic components which are arranged therein and act as a heat source, wherein a thermally conductive mat (3) is inserted between the heat source and an adjoining wall part of the housing, the mat having a base body (5) of simple sheet-like geometry, an underside (4) of the base body [being intended to be in] adapted for contact with the outer wall of the appliance and a top side of the base body [being intended to be in] adapted for contact with the heat source inside the appliance, and the mat being formed from [a] an electrically insulating homogeneous material having properties that produce a sticky surface.--.